

IN THE CLAIMS:

1.-16. (Canceled)

17. (Previously presented) An apparatus for treating a patient to improve cardiac performance and efficiency of the patient's heart, the apparatus comprising:

at least one electrode adapted to be located in a region associated with nervous tissue in a patient;

means for automatically applying electrical stimulation via the at least one electrode to improve balance of a neuro-endocrinological system of the patient in response to a physiologic signal of the patient; and

means for delivering a pacing therapy to the patient's heart of a type that improves cardiac output, wherein said pacing therapy consists of a cardiac resynchronization therapy.

18. (Previously presented) The apparatus of claim 17, wherein the at least one electrode further comprises at least one implanted electrode adapted to be located adjacent a patient's spine.

19. (Currently amended) The apparatus of claim 17, wherein the at least one electrode is adapted to be located external to and in direct contact with a portion of skin of the patient's body so that direct electrical stimulation of the portion of skin occurs when the at least one electrode is energized.

20. (Previously presented) The apparatus of claim 17, wherein the at least one electrode is adapted to be located in a subcutaneous space of the patient's body.

21. (Original) The apparatus of claim 17, wherein means for applying electrical stimulation further comprises:

means for monitoring one or more predetermined physiologic parameters of the patient; and

means for adjusting the electrical stimulation based on the one or more predetermined physiologic parameters.

22. (Original) The apparatus of claim 21, further comprising means for administering a triple chamber cardiac resynchronization therapy; and wherein the means for adjusting the electrical stimulation further comprises means for adjusting the electrical stimulation based on the administered cardiac resynchronization therapy.

23. (Previously presented) The apparatus of claim 17, wherein the at least one electrode is adapted to be located in a region containing a nerve associated with a trunk portion of the body of the patient.

24. (Previously presented) The apparatus of claim 17, wherein the at least one electrode is adapted to be located in a region containing at least one thoracic vertebrae.

25. (Previously presented) The apparatus of claim 17, wherein the at least one electrode is adapted to be located in a region containing at least one thoracic vertebrae in the range of T1-T12.

26. (Previously presented) The apparatus of claim 17, wherein the at least one electrode is adapted to be located in a region containing at least one thoracic nerve bundle.

27. (Previously presented) The apparatus of claim 17, wherein the at least one electrode is adapted to be located in a region containing at least one thoracic nerve bundle in the range of T1-T12.

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28.-40. (Canceled)